

S1 Table. Bacterial strains and plasmids used in this study

Strain or plasmid	Genotype or description*	Source
Bacterial strains		
<i>Escherichia coli</i> strains		
<i>E. coli</i> DH5 α	<i>fhuA2</i> Δ (<i>argF-lacZ</i>)U169 <i>phoA glnV44</i> Φ 80 Δ (<i>lacZ</i>)M15 <i>gyrA96 recA1 relA1 endA1 thi-1 hsdR17</i>	Lab collection
<i>E. coli</i> BL21(DE3)	<i>E. coli</i> B F ⁻ <i>dcm ompT hsd(r_B⁻ m_B⁻) gal λ(DE3)</i>	Lab collection
<i>X. campestris</i> pv. <i>campestris</i> strains		
Xcc 8004	Wild type strain (WT), Rif ^r	Lab collection
M0033	Δ <i>rpfC</i> , XCC2333 (<i>rpfC</i>) in-frame deletion mutant, Rif ^r	This study
M0034	Δ <i>rpfF</i> , XCC2332 (<i>rpfF</i>) in-frame deletion mutant, Rif ^r	This study
M0035	Δ <i>rpfF</i> Δ <i>rpfC</i> , <i>rpfF</i> and <i>rpfC</i> double mutant, Rif ^r	This study
M0036	Δ <i>rpfC-rpfC</i> , M0033 (<i>rpfC</i> mutant) containing a recombinant vector pHM1:: <i>rpfC</i> , Rif ^r , Sp ^r	This study
M0037	<i>rpfC</i> ^{Δsensor} , <i>rpfC</i> in-frame deletion mutant with 2-22 aa. coding sequences deleted, Rif ^r	This study
M0038	<i>rpfC</i> ^{ΔTM1-2} , <i>rpfC</i> in-frame deletion mutant with 23-72 aa. coding sequences deleted, Rif ^r	This study
M0039	<i>rpfC</i> ^{ΔTM2-3} , <i>rpfC</i> in-frame deletion mutant with 50-115 aa. coding sequences deleted, Rif ^r	This study
M0040	<i>rpfC</i> ^{ΔTM3-4} , <i>rpfC</i> in-frame deletion mutant with 93-147 aa. coding sequences deleted, Rif ^r	This study
M0041	<i>rpfC</i> ^{ΔTM4-5} , <i>rpfC</i> in-frame deletion mutant with 125-171 aa. coding sequences deleted, Rif ^r	This study
M0042	<i>rpfC</i> ^{Δinput} , <i>rpfC</i> in-frame deletion mutant with 2-171 aa. coding sequences deleted, Rif ^r	This study
M0043	Δ <i>rpfF</i> Δ <i>rpfC-rpfC</i> , M0035 (<i>rpfF</i> and <i>rpfC</i> double in-frame deletion mutant) containing a recombinant vector pHM1:: <i>rpfC</i> , Rif ^r , Sp ^r	This study
M0044	Δ <i>rpfF-rpfC</i> ^{Δsensor} , <i>rpfF</i> and <i>rpfC</i> ^{Δsensor} double in-frame deletion mutant, Rif ^r	This study
M0045	Δ <i>rpfF-rpfC</i> ^{ΔTM1-2} , <i>rpfF</i> and <i>rpfC</i> ^{ΔTM1-2} double in-frame deletion mutant, Rif ^r	This study
M0045	Δ <i>rpfF-rpfC</i> ^{ΔTM2-3} , <i>rpfF</i> and <i>rpfC</i> ^{ΔTM2-3} double in-frame deletion mutant, Rif ^r	This study
M0046	Δ <i>rpfF-rpfC</i> ^{ΔTM34} , <i>rpfF</i> and <i>rpfC</i> ^{ΔTM34} double in-frame deletion mutant, Rif ^r	This study
M0047	Δ <i>rpfF-rpfC</i> ^{ΔTM4-5} , <i>rpfF</i> and <i>rpfC</i> ^{ΔTM4-5} double in-frame deletion mutant, Rif ^r	This study
M0048	Δ <i>rpfF-rpfC</i> _{Δinput} , <i>rpfF</i> and <i>rpfC</i> _{Δinput} double in-frame deletion mutant, Rif ^r	This study
M0049	Δ <i>rpfF</i> (<i>GUS</i>), Δ <i>rpfF</i> derivative containing a recombinant vector pHM2:: <i>PengXcc-GUS</i> , Rif ^r , Sp ^r	This study
M0050	<i>rpfC</i> ^{Δsensor} (<i>GUS</i>), <i>rpfC</i> ^{Δsensor} derivative containing a	This study

M0051	recombinant vector pHM2:: <i>PengXcc-GUS</i> , Rif ^r , Sp ^r <i>rpfC</i> ^{ΔTM1-2} (<i>GUS</i>), <i>rpfC</i> ^{ΔTM1-2} derivative containing a	This study
M0052	recombinant vector pHM2:: <i>PengXcc-GUS</i> , Rif ^r , Sp ^r <i>rpfC</i> ^{ΔTM2-3} (<i>GUS</i>), <i>rpfC</i> ^{ΔTM2-3} derivative containing a	This study
M0053	recombinant vector pHM2:: <i>PengXcc-GUS</i> , Rif ^r , Sp ^r <i>rpfC</i> ^{ΔTM3-4} (<i>GUS</i>), <i>rpfC</i> ^{ΔTM3-4} derivative containing a	This study
M0054	recombinant vector pHM2:: <i>PengXcc-GUS</i> , Rif ^r , Sp ^r <i>rpfC</i> ^{ΔTM4-5} (<i>GUS</i>), <i>rpfC</i> ^{ΔTM4-5} derivative containing a	This study
M0055	recombinant vector pHM2:: <i>PengXcc-GUS</i> , Rif ^r , Sp ^r <i>rpfC</i> ^{Δinput} (<i>GUS</i>), <i>rpfC</i> ^{Δinput} derivative containing a recombinant	This study
M0056	<i>ΔrpfFΔrpfC(GUS)</i> , <i>ΔrpfFΔrpfC</i> derivative containing a	This study
M0057	recombinant vector pHM2:: <i>PengXcc-GUS</i> , Rif ^r , Sp ^r <i>ΔrpfF- rpfC</i> ^{Δsensor} (<i>GUS</i>), <i>ΔrpfF- rpfC</i> _{Δsensor} derivative	This study
M0058	containing a recombinant vector pHM2:: <i>PengXcc-GUS</i> , Rif ^r , Sp ^r <i>ΔrpfF- rpfC</i> ^{ΔTM1-2} (<i>GUS</i>), <i>ΔrpfF- rpfC</i> ^{ΔTM1-2} derivative	This study
M0059	containing a recombinant vector pHM2:: <i>PengXcc-GUS</i> , Rif ^r , Sp ^r <i>ΔrpfF- rpfC</i> ^{ΔTM3-4} (<i>GUS</i>), <i>ΔrpfF- rpfC</i> ^{ΔTM3-4} derivative	This study
M0060	containing a recombinant vector pHM2:: <i>PengXcc-GUS</i> , Rif ^r , Sp ^r <i>ΔrpfF- rpfC</i> ^{ΔTM4-5} (<i>GUS</i>), <i>ΔrpfF- rpfC</i> ^{ΔTM4-5} derivative	This study
M0061	containing a recombinant vector pHM2:: <i>PengXcc-GUS</i> , Rif ^r , Sp ^r <i>ΔrpfF-GUS</i> , transcriptional fusion. a <i>gusE</i> gene and its own	This study
M0062	SD sequence was fused into the DNA region between <i>PengXcc</i> promoter and <i>engXcc</i> in the background of <i>ΔrpfF</i> <i>ΔrpfFΔrpfC-GUS</i> , transcriptional fusion. a <i>gusE</i> gene and its	This study
M0063	own SD sequence was fused into the DNA region between <i>PengXcc</i> promoter and <i>engXcc</i> in the background of <i>ΔrpfF-ΔrpfC</i> <i>ΔrpfFΔrpfC-rpfC</i> ^{K2A} - <i>GUS</i> , M0062 containing a recombinant	This study
M0064	vector pHM1:: <i>rpfC</i> ^{K2A} , Rif ^r , Sp ^r <i>ΔrpfFΔrpfC-rpfC</i> ^{S3A} - <i>GUS</i> , M0062 containing a recombinant	This study
M0065	vector pHM1:: <i>rpfC</i> ^{S3A} , Rif ^r , Sp ^r <i>ΔrpfFΔrpfC-rpfC</i> ^{P4A} - <i>GUS</i> , M0062 containing a recombinant	This study
M0066	vector pHM1:: <i>rpfC</i> ^{P4A} , Rif ^r , Sp ^r <i>ΔrpfFΔrpfC-rpfC</i> ^{L5A} - <i>GUS</i> , M0062 containing a recombinant	This study
M0067	vector pHM1:: <i>rpfC</i> ^{L5A} , Rif ^r , Sp ^r <i>ΔrpfFΔrpfC-rpfC</i> ^{P6A} - <i>GUS</i> , M0062 containing a recombinant	This study
M0068	vector pHM1:: <i>rpfC</i> ^{P6A} , Rif ^r , Sp ^r <i>ΔrpfFΔrpfC-rpfC</i> ^{W7A} - <i>GUS</i> , M0062 containing a recombinant	This study
M0069	vector pHM1:: <i>rpfC</i> ^{W7A} , Rif ^r , Sp ^r <i>ΔrpfFΔrpfC-rpfC</i> ^{L8A} - <i>GUS</i> , M0062 containing a recombinant	This study

	vector pHM1:: <i>rpfC</i> ^{L8A} , Rif ^r , Sp ^r	
M0070	$\Delta rpfF\Delta rpfC-rpfC^{K9A}-GUS$, M0062 containing a recombinant vector pHM1:: <i>rpfC</i> ^{K9A} , Rif ^r , Sp ^r	This study
M0071	$\Delta rpfF\Delta rpfC-rpfC^{R10A}-GUS$, M0062 containing a recombinant vector pHM1:: <i>rpfC</i> ^{R10A} , Rif ^r , Sp ^r	This study
M0072	$\Delta rpfF\Delta rpfC-rpfC^{R11A}-GUS$, M0062 containing a recombinant vector pHM1:: <i>rpfC</i> ^{R11A} , Rif ^r , Sp ^r	This study
M0073	$\Delta rpfF\Delta rpfC-rpfC^{L12A}-GUS$, M0062 containing a recombinant vector pHM1:: <i>rpfC</i> ^{L12A} , Rif ^r , Sp ^r	This study
M0074	$\Delta rpfF\Delta rpfC-rpfC^{S13A}-GUS$, M0062 containing a recombinant vector pHM1:: <i>rpfC</i> ^{S13A} , Rif ^r , Sp ^r	This study
M0075	$\Delta rpfF\Delta rpfC-rpfC^{G14A}-GUS$, M0062 containing a recombinant vector pHM1:: <i>rpfC</i> ^{G14A} , Rif ^r , Sp ^r	This study
M0076	$\Delta rpfF\Delta rpfC-rpfC^{R15A}-GUS$, M0062 containing a recombinant vector pHM1:: <i>rpfC</i> ^{R15A} , Rif ^r , Sp ^r	This study
M0077	$\Delta rpfF\Delta rpfC-rpfC^{A16D}-GUS$, M0062 containing a recombinant vector pHM1:: <i>rpfC</i> ^{A16D} , Rif ^r , Sp ^r	This study
M0078	$\Delta rpfF\Delta rpfC-rpfC^{D17A}-GUS$, M0062 containing a recombinant vector pHM1:: <i>rpfC</i> ^{D17A} , Rif ^r , Sp ^r	This study
M0079	$\Delta rpfF\Delta rpfC-rpfC^{S18A}-GUS$, M0062 containing a recombinant vector pHM1:: <i>rpfC</i> ^{S18A} , Rif ^r , Sp ^r	This study
M0080	$\Delta rpfF\Delta rpfC-rpfC^{E19A}-GUS$, M0062 containing a recombinant vector pHM1:: <i>rpfC</i> ^{E19A} , Rif ^r , Sp ^r	This study
M0081	$\Delta rpfF\Delta rpfC-rpfC^{H20A}-GUS$, M0062 containing a recombinant vector pHM1:: <i>rpfC</i> ^{H20A} , Rif ^r , Sp ^r	This study
M0082	$\Delta rpfF\Delta rpfC-rpfC^{A21D}-GUS$, M0062 containing a recombinant vector pHM1:: <i>rpfC</i> ^{A21D} , Rif ^r , Sp ^r	This study
M0083	$\Delta rpfF\Delta rpfC-rpfC^{Q22A}-GUS$, M0062 containing a recombinant vector pHM1:: <i>rpfC</i> ^{Q22A} , Rif ^r , Sp ^r	This study
M0084	$\Delta rpfF\Delta rpfC-rpfC-GUS$, M0062 containing a recombinant vector pHM1:: <i>rpfC</i> , Rif ^r , Sp ^r	This study
M0085	$\Delta rpfC-rpfC^{K2A}$, M0033 containing a recombinant vector pHM1:: <i>rpfC</i> ^{K2A} , Rif ^r , Sp ^r	This study
M0086	$\Delta rpfC-rpfC^{S3A}$, M0033 containing a recombinant vector pHM1:: <i>rpfC</i> ^{S3A} , Rif ^r , Sp ^r	This study
M0087	$\Delta rpfC-rpfC^{P4A}$, M0033 containing a recombinant vector pHM1:: <i>rpfC</i> ^{P4A} , Rif ^r , Sp ^r	This study
M0088	$\Delta rpfC-rpfC^{L5A}$, M0033 containing a recombinant vector pHM1:: <i>rpfC</i> ^{L5A} , Rif ^r , Sp ^r	This study
M0089	$\Delta rpfC-rpfC^{P6A}$, M0033 containing a recombinant vector pHM1:: <i>rpfC</i> ^{P6A} , Rif ^r , Sp ^r	This study
M0090	$\Delta rpfC-rpfC^{W7A}$, M0033 containing a recombinant vector pHM1:: <i>rpfC</i> ^{W7A} , Rif ^r , Sp ^r	This study
M0091	$\Delta rpfC-rpfC^{L8A}$, M0033 containing a recombinant vector pHM1:: <i>rpfC</i> ^{L8A} , Rif ^r , Sp ^r	This study

M0092	$\Delta rpfC-rpfC^{K9A}$, M0033 containing a recombinant vector pHM1:: $rpfC^{K9A}$, Rif ^r , Sp ^r	This study
M0093	$\Delta rpfC-rpfC^{R10A}$, M0033 containing a recombinant vector pHM1:: $rpfC^{R10A}$, Rif ^r , Sp ^r	This study
M0094	$\Delta rpfC-rpfC^{R11A}$, M0033 containing a recombinant vector pHM1:: $rpfC^{R11A}$, Rif ^r , Sp ^r	This study
M0095	$\Delta rpfC-rpfC^{L12A}$, M0033 containing a recombinant vector pHM1:: $rpfC^{L12A}$, Rif ^r , Sp ^r	This study
M0096	$\Delta rpfC-rpfC^{S13A}$, M0033 containing a recombinant vector pHM1:: $rpfC^{S13A}$, Rif ^r , Sp ^r	This study
M0097	$\Delta rpfC-rpfC^{G14A}$, M0033 containing a recombinant vector pHM1:: $rpfC^{G14A}$, Rif ^r , Sp ^r	This study
M0098	$\Delta rpfC-rpfC^{R15A}$, M0033 containing a recombinant vector pHM1:: $rpfC^{R15A}$, Rif ^r , Sp ^r	This study
M0099	$\Delta rpfC-rpfC^{A16D}$, M0033 containing a recombinant vector pHM1:: $rpfC^{A16D}$, Rif ^r , Sp ^r	This study
M0100	$\Delta rpfC-rpfC^{D17A}$, M0033 containing a recombinant vector pHM1:: $rpfC^{D17A}$, Rif ^r , Sp ^r	This study
M0101	$\Delta rpfC-rpfC^{S18A}$, M0033 containing a recombinant vector pHM1:: $rpfC^{S18A}$, Rif ^r , Sp ^r	This study
M0102	$\Delta rpfC-rpfC^{E19A}$, M0033 containing a recombinant vector pHM1:: $rpfC^{E19A}$, Rif ^r , Sp ^r	This study
M0103	$\Delta rpfC-rpfC^{H20A}$, M0033 containing a recombinant vector pHM1:: $rpfC^{H20A}$, Rif ^r , Sp ^r	This study
M0104	$\Delta rpfC-rpfC^{A21D}$, M0033 containing a recombinant vector pHM1:: $rpfC^{A21D}$, Rif ^r , Sp ^r	This study
M0105	$\Delta rpfC-rpfC^{Q22A}$, M0033 containing a recombinant vector pHM1:: $rpfC^{Q22A}$, Rif ^r , Sp ^r	This study
M0106	$\Delta rpfF\Delta rpfC-rpfC^{R15K}-GUS$, M0062 containing a recombinant vector pHM1:: $rpfC^{R15K}$, Rif ^r , Sp ^r	This study
M0107	$\Delta rpfF\Delta rpfC-rpfC^{R15H}-GUS$, M0062 containing a recombinant vector pHM1:: $rpfC^{R15H}$, Rif ^r , Sp ^r	This study
M0108	$\Delta rpfF\Delta rpfC-rpfC^{A16V}-GUS$, M0062 containing a recombinant vector pHM1:: $rpfC^{A16V}$, Rif ^r , Sp ^r	This study
M0109	$\Delta rpfF\Delta rpfC-rpfC^{A16G}-GUS$, M0062 containing a recombinant vector pHM1:: $rpfC^{A16G}$, Rif ^r , Sp ^r	This study
M0110	$\Delta rpfF\Delta rpfC-rpfC^{D17E}-GUS$, M0062 containing a recombinant vector pHM1:: $rpfC^{D17E}$, Rif ^r , Sp ^r	This study
M0111	$\Delta rpfF\Delta rpfC-rpfC^{D17N}-GUS$, M0062 containing a recombinant vector pHM1:: $rpfC^{D17N}$, Rif ^r , Sp ^r	This study
M0112	$\Delta rpfF\Delta rpfC-rpfCE19D-GUS$, M0062 containing a recombinant vector pHM1:: $rpfC^{E19D}$, Rif ^r , Sp ^r	This study
M0113	$\Delta rpfF\Delta rpfC-rpfC^{E19Q}-GUS$, M0062 containing a recombinant vector pHM1:: $rpfC^{E19Q}$, Rif ^r , Sp ^r	This study
M0114	$\Delta rpfF\Delta rpfC-rpfC^{A21V}-GUS$, M0062 containing a	This study

M0115	recombinant vector pHM1:: <i>rpfC</i> ^{A21V} , Rif ^r , Sp ^r <i>ΔrpfFΔrpfC-rpfC</i> ^{A21G} - <i>GUS</i> , M0062 containing a	This study
M0116	recombinant vector pHM1:: <i>rpfC</i> ^{A21G} , Rif ^r , Sp ^r <i>ΔrpfFΔrpfC-rpfC</i> ^{Q22N} - <i>GUS</i> , M0062 containing a	This study
M0117	recombinant vector pHM1:: <i>rpfC</i> ^{Q22N} , Rif ^r , Sp ^r <i>ΔrpfFΔrpfC-rpfC</i> ^{Q22E} - <i>GUS</i> , M0062 containing a	This study
M0118	recombinant vector pHM1:: <i>rpfC</i> ^{Q22E} , Rif ^r , Sp ^r <i>ΔrpfFΔrpfC-rpfC</i> ^{S18N} - <i>GUS</i> , M0062 containing a	This study
M0119	recombinant vector pHM1:: <i>rpfC</i> ^{S18N} , Rif ^r , Sp ^r <i>ΔrpfFΔrpfC-rpfC</i> ^{S18Q} - <i>GUS</i> , M0062 containing a	This study
M0120	recombinant vector pHM1:: <i>rpfC</i> ^{S18Q} , Rif ^r , Sp ^r <i>ΔrpfFΔrpfC-rpfC</i> ^{S18D} - <i>GUS</i> , M0062 containing a	This study
M0121	recombinant vector pHM1:: <i>rpfC</i> ^{S18D} , Rif ^r , Sp ^r <i>ΔrpfFΔrpfC-rpfC</i> ^{S18E} - <i>GUS</i> , M0062 containing a recombinant	This study
M0122	vector pHM1:: <i>rpfC</i> ^{S18E} , Rif ^r , Sp ^r <i>ΔrpfFΔrpfC-rpfC</i> ^{S18K} - <i>GUS</i> , M0062 containing a	This study
M0123	recombinant vector pHM1:: <i>rpfC</i> ^{S18K} , Rif ^r , Sp ^r <i>ΔrpfFΔrpfC-rpfC</i> ^{S18R} - <i>GUS</i> , M0062 containing a	This study
M0124	recombinant vector pHM1:: <i>rpfC</i> ^{S18R} , Rif ^r , Sp ^r <i>ΔrpfFΔrpfC-rpfC</i> ^{S18H} - <i>GUS</i> , M0062 containing a	This study
M0125	recombinant vector pHM1:: <i>rpfC</i> ^{S18H} , Rif ^r , Sp ^r <i>ΔrpfFΔrpfC-rpfC</i> ^{S18G} - <i>GUS</i> , M0062 containing a	This study
M0126	recombinant vector pHM1:: <i>rpfC</i> ^{S18G} , Rif ^r , Sp ^r <i>ΔrpfFΔrpfC-rpfC</i> ^{S18V} - <i>GUS</i> , M0062 containing a	This study
M0127	recombinant vector pHM1:: <i>rpfC</i> ^{S18V} , Rif ^r , Sp ^r <i>ΔrpfFΔrpfC-rpfC</i> ^{S18L} - <i>GUS</i> , M0062 containing a recombinant	This study
M0128	vector pHM1:: <i>rpfC</i> ^{S18L} , Rif ^r , Sp ^r <i>ΔrpfFΔrpfC-rpfC</i> ^{S18I} - <i>GUS</i> , M0062 containing a recombinant	This study
M0129	vector pHM1:: <i>rpfC</i> ^{S18I} , Rif ^r , Sp ^r <i>ΔrpfFΔrpfC-rpfC</i> ^{S18P} - <i>GUS</i> , M0062 containing a recombinant	This study
M0130	vector pHM1:: <i>rpfC</i> ^{S18P} , Rif ^r , Sp ^r <i>ΔrpfFΔrpfC-rpfC</i> ^{S18F} - <i>GUS</i> , M0062 containing a recombinant	This study
M0131	vector pHM1:: <i>rpfC</i> ^{S18F} , Rif ^r , Sp ^r <i>ΔrpfFΔrpfC-rpfC</i> ^{S18Y} - <i>GUS</i> , M0062 containing a	This study
M0132	recombinant vector pHM1:: <i>rpfC</i> ^{S18Y} , Rif ^r , Sp ^r <i>ΔrpfFΔrpfC-rpfC</i> ^{S18W} - <i>GUS</i> , M0062 containing a	This study
M0133	recombinant vector pHM1:: <i>rpfC</i> ^{S18W} , Rif ^r , Sp ^r <i>ΔrpfFΔrpfC-rpfC</i> ^{S18C} - <i>GUS</i> , M0062 containing a	This study
M0134	recombinant vector pHM1:: <i>rpfC</i> ^{S18C} , Rif ^r , Sp ^r <i>ΔrpfFΔrpfC-rpfC</i> ^{S18M} - <i>GUS</i> , M0062 containing a	This study
M0135	recombinant vector pHM1:: <i>rpfC</i> ^{S18M} , Rif ^r , Sp ^r <i>ΔrpfFΔrpfC-rpfC</i> ^{S18T} - <i>GUS</i> , M0062 containing a recombinant	This study
M0136	vector pHM1:: <i>rpfC</i> ^{S18T} , Rif ^r , Sp ^r <i>ΔrpfFΔrpfC-rpfC</i> ^{L172A} - <i>GUS</i> , M0062 containing a	This study
	recombinant vector pHM1:: <i>rpfC</i> ^{L172A} , Rif ^r , Sp ^r	

M0137	$\Delta rpfF\Delta rpfC-rpfC^{R173A}-GUS$, M0062 containing a recombinant vector pHM1:: $rpfC^{R173A}$, Rif ^r , Sp ^r	This study
M0138	$\Delta rpfF\Delta rpfC-rpfC^{A174D}-GUS$, M0062 containing a recombinant vector pHM1:: $rpfC^{A174D}$, Rif ^r , Sp ^r	This study
M0139	$\Delta rpfF\Delta rpfC-rpfC^{M175A}-GUS$, M0062 containing a recombinant vector pHM1:: $rpfC^{M175A}$, Rif ^r , Sp ^r	This study
M0140	$\Delta rpfF\Delta rpfC-rpfC^{T176A}-GUS$, M0062 containing a recombinant vector pHM1:: $rpfC^{T176A}$, Rif ^r , Sp ^r	This study
M0141	$\Delta rpfF\Delta rpfC-rpfC^{R177A}-GUS$, M0062 containing a recombinant vector pHM1:: $rpfC^{R177A}$, Rif ^r , Sp ^r	This study
M0142	$\Delta rpfF\Delta rpfC-rpfC^{A178D}-GUS$, M0062 containing a recombinant vector pHM1:: $rpfC^{A178D}$, Rif ^r , Sp ^r	This study
M0143	$\Delta rpfF\Delta rpfC-rpfC^{V179A}-GUS$, M0062 containing a recombinant vector pHM1:: $rpfC^{V179A}$, Rif ^r , Sp ^r	This study
M0144	$\Delta rpfF\Delta rpfC-rpfC^{R180A}-GUS$, M0062 containing a recombinant vector pHM1:: $rpfC^{R180A}$, Rif ^r , Sp ^r	This study
M0145	$\Delta rpfF\Delta rpfC-rpfC^{E181A}-GUS$, M0062 containing a recombinant vector pHM1:: $rpfC^{E181A}$, Rif ^r , Sp ^r	This study
M0146	$\Delta rpfF\Delta rpfC-rpfC^{A182D}-GUS$, M0062 containing a recombinant vector pHM1:: $rpfC^{A182D}$, Rif ^r , Sp ^r	This study
M0147	$\Delta rpfF\Delta rpfC-rpfC^{R183A}-GUS$, M0062 containing a recombinant vector pHM1:: $rpfC^{R183A}$, Rif ^r , Sp ^r	This study
M0148	$\Delta rpfF\Delta rpfC-rpfC^{H184A}-GUS$, M0062 containing a recombinant vector pHM1:: $rpfC^{H184A}$, Rif ^r , Sp ^r	This study
M0149	$\Delta rpfF\Delta rpfC-rpfC^{A185D}-GUS$, M0062 containing a recombinant vector pHM1:: $rpfC^{A185D}$, Rif ^r , Sp ^r	This study
M0150	$\Delta rpfF\Delta rpfC-rpfC^{N186A}-GUS$, M0062 containing a recombinant vector pHM1:: $rpfC^{N186A}$, Rif ^r , Sp ^r	This study
M0151	$\Delta rpfF\Delta rpfC-rpfC^{Q187A}-GUS$, M0062 containing a recombinant vector pHM1:: $rpfC^{Q187A}$, Rif ^r , Sp ^r	This study
M0152	$\Delta rpfF\Delta rpfC-rpfC^{D17A-A178D}-GUS$, M0062 containing a recombinant vector pHM1:: $rpfC^{D17A-A178D}$, Rif ^r , Sp ^r	This study
M0153	$\Delta rpfF\Delta rpfC-rpfC^{S18A-A178D}-GUS$, M0062 containing a recombinant vector pHM1:: $rpfC^{S18A-A178D}$, Rif ^r , Sp ^r	This study
M0154	$\Delta rpfF\Delta rpfC-rpfC^{Q22A-A178D}-GUS$, M0062 containing a recombinant vector pHM1:: $rpfC^{Q22A-A178D}$, Rif ^r , Sp ^r	This study
M0155	$\Delta rpfC-rpfC^{S18T}$, M0033 containing a recombinant vector pHM1:: $rpfC^{S18T}$, Rif ^r , Sp ^r	This study
Plasmids		
pK18mob	Suicide vector used in single-crossover recombination, Kan ^r	(1)
pK18mobsacB	Suicide vector used in double-crossover recombination, Kan ^r	(1)
pHM1	Complementary vector with <i>Plac</i> promoter before MCS, Sp ^r	(2)
pHM2	Complementary vector with no promoter before MCS, Sp ^r	Lab collection

pET30a	Protein expression vector, Kan ^r	Novagen
pGEX-6P-1	Protein expression vector, Amp ^r	Lab collection
pET30a-RpfC	Protein expression vector, pET30a::RpfC, Kan ^r , expressing full-length RpfC	This study
pET30a-RpfC _{Δinput}	Protein expression vector, pET30a::RpfC ^{Δinput} , Kan ^r , expressing RpfC without input domain	This study
pET30a-RpfC-H657A	Protein expression vector, pET30a::RpfC ^{H657A} , Kan ^r , expressing the H198A point mutated protein of RpfC	This study
pET30a-RpfC-D512V	Protein expression vector, pET30a::RpfC ^{D512V} , Kan ^r , expressing the D512V point mutated protein of RpfC	This study
pET30a-RpfC-S3A	Protein expression vector, pET30a::RpfC ^{S3A} , Kan ^r , expressing the S3A point mutated protein of RpfC	This study
pET30a-RpfC-R15A	Protein expression vector, pET30a::RpfC ^{R15A} , Kan ^r , expressing the R15A point mutated protein of RpfC	This study
pET30a-RpfC-A16D	Protein expression vector, pET30a::RpfC ^{A16D} , Kan ^r , expressing the A16D point mutated protein of RpfC	This study
pET30a-RpfC-D17A	Protein expression vector, pET30a::RpfC ^{D17A} , Kan ^r , expressing the D17A point mutated protein of RpfC	This study
pET30a-RpfC-S18A	Protein expression vector, pET30a::RpfC ^{S18A} , Kan ^r , expressing the S18A point mutated protein of RpfC	This study
pET30a-RpfC-E19A	Protein expression vector, pET30a::RpfC ^{E19A} , Kan ^r , expressing the E19A point mutated protein of RpfC	This study
pET30a-RpfC-H20A	Protein expression vector, pET30a::RpfC ^{H20A} , Kan ^r , expressing the H20A point mutated protein of RpfC	This study
pET30a-RpfC-A21D	Protein expression vector, pET30a::RpfC ^{A21D} , Kan ^r , expressing the A21D point mutated protein of RpfC	This study
pET30a-RpfC-Q22A	Protein expression vector, pET30a::RpfC ^{Q22A} , Kan ^r , expressing the Q22A point mutated protein of RpfC	This study
pET30a-RpfC-S18T	Protein expression vector, pET30a::RpfC ^{S18T} , Kan ^r , expressing the S18T point mutated protein of RpfC	This study
Sensor-GST	Protein expression vector, pGEX-6P-1::sensor, Amp ^r , expressing sensor region of RpfC, Amp ^r	This study
pET30a-RpfC _{Δsensor}	Protein expression vector, pET30a::RpfC _{Δsensor} , Kan ^r , expressing full length of RpfC with 22 aa of N terminal deletion	This study
pET30a-RpfG	Protein expression vector, pET30a::RpfG, Kan ^r , expressing full-length RpfG	This study
pET30a-RpfG-D80V	Protein expression vector, pET30a::RpfG ^{D80V} , Kan ^r , expressing the D80V point mutated protein of RpfG.	This study

* SD sequence: The Shine-Dalgarno (SD) sequence. MCS site: multiple cloning site. Kan^r: resistant to kanamycin; Raf^r: resistant to rifamycin; Sp^r: resistant to spectinomycin.

References

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